Exhibit 3

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

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UNITED STATES OF AMERICA, : 11-CR-800(WFK)
: :
-against- : United States Courthouse
: Brooklyn, New York
: :
SEMYON BUMAGIN, : Tuesday, July 22, 2014
Defendant. : 1:30 p.m.
: :
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TRANSCRIPT OF CRIMINAL CAUSE FOR HEARING
BEFORE THE HONORABLE WILLIAM F. KUNTZ, II
UNITED STATES DISTRICT COURT JUDGE

A P P E A R A N C E S:

For the Government: LORETTA E. LYNCH, ESQ.
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For the Defendant: BY: **ZOE JAYDE DOLAN, ESQ.**

Also present: Special Agent John Penza

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Proceedings recorded by computerized stenography. Transcript produced by Computer-aided Transcription.

THE COURT CLERK: We are here for a criminal hearing, docket number 11-CR-800, United States v. Bumagin.

Counsel, would you please state your appearances for the record.

MR. TROWEL: Good afternoon, your Honor.

Kevin Trowel for the United States, and with me is John Gatta and Jackie Kasulis, and Special Agent John Penza.

MS. DOLAN: Zoe Dolan for the defendant Semyon Bumagin, who is here with me with the Russian interpreters.

Good afternoon, your Honor.

THE COURT: Good afternoon. You may be seated.

Before we formally get started with the witness, I want all parties and those present to know that in light of yesterday's exchange, I thought it would be appropriate to consult the "investigator," and I'm going to share with you the following: There is a famous anecdote featured in Winston Churchill and the British politician Betsy Braddock that I think is fictional. Supposedly Braddock encountered an intoxicated Churchill and said, sir, you are drunk. He replied, and you, Betsy, are ugly. But I shall be sober in the morning, and you will still be ugly. The website disagrees about Churchill's exact words, but I think this whole story was concocted based on a scene in a W.C. Fields film that was released in the 1930s. The film was called Mr. Getts, and the script reads as follows: You are drunk and the

majority is yeah, and you are crazy, and I will be sober tomorrow, and you will be crazy for the rest of your life.

MS. DOLAN: My Dad is going to be devastated.

THE COURT: But, just to make it clear, the true iteration is that the joke has a very long history, and the earliest version is located more than 125 years ago. The old English raconteur, Augustus John Kupberg kept a diary, and the entry dated on July 16, 1882 recounts an incident involving a member of the House of Parliament identified only by the initials AB. The great AB was tremendously jostled going down to the house. AB didn't like it. You know who I am, he said. I'm a member of Parliament, and I am Mr. AB. I don't know about that, said one of the roughs, but I know you are damn fool. You're drunk, said AB, and you don't know what you are saying. Perhaps I'm rather drunk tonight, said the man, but I shall be sober tomorrow morning. But you are a damn fool tonight, and you will be a damn fool tomorrow morning.

All right. You may resume with the testimony.

MS. DOLAN: Thank you. I am a fool right now trying to get this thing to work.

THE COURT: Is the elmo turned on?

Well, I'm out of W.C. Fields and Winston Churchill, so let's get going.

MS. DOLAN: The defense calls Monica Rivera-Mindt.

THE COURT: Please come forward and Mr. Jackson

will swear you in.

M O N I C A R I V E R A-M I N D T,

called as a witness, having been first duly sworn, testifies as follows:

THE COURT: Please be seated, ma'am.

State and spell your name clearly and distinctly. Speak into the microphone, that you can bring towards you, that way the court reporter can hear you, and the parties can hear you as well. Okay? Move the mike right in front of you like this.

THE WITNESS: Okay.

My name is Monica, M-O-N-I-C-A, Grace, G-r-a-c-e, Rivera-Mindt, R-i-v-e-r-a-M-i-n-d-t.

THE COURT: Thank you.

Counsel, you may proceed.

MS. DOLAN: Thank you.

DIRECT EXAMINATION

BY MS. DOLAN:

Q Dr. Rivera-Mindt, what do you do for a living?

A I'm a clinical neuropsychologist, professor, and researcher.

Q And what is a neuropsychologist?

A Somebody who is focused on the study of the relationship between the brain and behavior. I have a Ph.D in clinical psychology, with the specialization in neuropsychology.

Q With respect to your credentials, can you elaborate on those? Is that the highest or specific level that you can reach in the field?
A So I'm licensed as a clinical psychologist, which is a basic or fundamental competency benchmark for a psychologist, but I'm also board certified in clinical neuropsychology, which is the highest recognition of my expertise as a neuropsychologist, and that's through the American Board of Professional Psychology in the clinical neuropsychology specialization.
Q And do you have any familiarity working with individuals for whom English is a second language or immigrant populations or both?
A Yes.
Q Could you describe that, please?
A My clinical and research specialty is diverse population, including Latinos and other immigrant populations as well.
Q Is your focus principally on Latino populations?
A Yes.
Q Do you have experience with other populations, in addition?
A Yes.
Q With respect to people who English is a second language is a subset of people you just described?
A Absolutely, yes.

Q Could you also -- have you done any work for lawyers on any particular cases?
A Yes, I have.
Q Could you briefly summarize the type of work you have done for lawyers or in connection with legal cases?
A Hm hmm. So I --
THE COURT: You can't say hm hmm. Say yes or no.
THE WITNESS: Yes.
THE COURT: Go ahead.
Q Could you elaborate on your experience on legal cases and working with lawyers?
A Yes. So I got a private practice, and a subset of that private practice includes forensic work, and I worked with both sides, with prosecutors and defense attorneys, in that work doing neuropsychological evaluations.
Q Have you also worked on civil cases?
A Yes.
Q Has the majority been on civil cases or criminal cases?
A The majority has been civil.
Q And for what purpose were you retained in this particular case?
A I was retained on this case to conduct a neuropsychological evaluation to first determine whether or not Mr. Bumagin was experiencing neuropsychological impairment, and, if so, the nature of those impairments. You

know, the potential cause and potential consequences of that.
Q And were you directed specifically to the question of competency or those questions more were generally?
A More generally.
Q Are you familiar with dementia?
A Yes.
Q Are you familiar with Alzheimer's?
A Yes.
Q What is Alzheimer's?
A A neurodegenerative disease which is one cause of dementia, and it's insidious course. So there is no cure for it, and it causes significant neuropsychological impairment across a lot of domains.
Q Is that true for dementia as well?
A For dementia, there's significant cognitive impairment, as well as functional impairment.
Q Is Alzheimer's a form of dementia?
A Yes, correct.
Q Is it the most common form?
A It's the most common form.
Q Do you have experience working with individuals who have symptomology consistent with dementia?
A Yes.
Q And have you worked with those individuals over the course of time?

A Yes.
Q And are you familiar with the general characteristics and symptoms and consequences of dementia?
A Yes.
Q And could you please give us an overview?
A Dementia broadly or specific to Alzheimer's?
Q Both. If you can start with dementia?
A More globally with dementia, it typically involves significant impairment in memory, and at least one other cognitive domain, along with significant functional impairment.

So, for instance, ability to complete activities of daily living, work, taking medications, you know, a number of different things could be part of that functional impairment, and it is typically caused by a medical etiology, such as the Alzheimer's could be another neurodegenerative disease, Parkinson's, HIV, and other causes for dementia as well, such as substance abuse.
Q And are those causes mutually exclusive or can they work in tandem with one another?
A They can work in tandem.
Q So, if one has substance abuse injury and a history of dementia, fair to say all of those factors contribute to those individual's conduct?
A That would be correct.

Q Now, can you describe the path that dementia or Alzheimer's take, or does dementia and Alzheimer's take the same path in terms of progression?

A It would depend on the type of dementia that we are talking here. So with Alzheimer's, that would be considered a type of dementia where we might expect initially to see problems and learning memory, executive functioning, and then the course would be insidious over time. The person would decline; whereas, with another type of dementia, it could have a different course and a different set of cognitive problems.

Q Do any forms of dementia improve over time?

A That is possible. So, for instance, with HIV related dementia, a person can, if the virus in their brain was treated, the dementia could clear. That can have more of an oscillating source. If they are treated with antiviral medications --

THE COURT: Slow it down.

A If they are treated with antiviral medication, for instance, and the virus was well-controlled within the central nervous system, then there could be improvement in cognitive functioning, but that's very different from Alzheimer's or other types of dementia.

Q Let's talk about that.

You mentioned the word etiology before. If you are able to determine the etiology of the dementia that a

person is suffering from, is there a possibility that it can be cured?

A Again, with HIV, for instance, there can be changes and improvements, but in general, no. For instance in Alzheimer's, there's no cure.

Q HIV /SKAPBLT when you are able to identify the etiology /OPLT?

A Hm hmm.

THE COURT: That was four hm hmm's in a row. Let her finish the question before you interject. Complete the question and then you will answer yes, no, or otherwise. Go ahead.

Q So if you are able to identify whatever it is in the brain that is causing the problem, and if there is a treatment for that problem or that cause, then it can be resolved; is that fair to say?

A Yes.

Q But if you are not able to identify the etiology or cause, then is it fair to say it's highly reduced likelihood that you would be able to treat or reduce the dementia?

A Correct.

Q Now, in the course of dementia, we talked about memory loss.

Are there any other symptoms that are associated with dementia and its progression?

A Yes, so certainly memory is a common impairment, but, in addition, you can see impairments in learning, processing, speed, attention, working memory, and certainly executive functioning, which is abstract problem solving or complex reasoning.

Q Let's break that down a little bit more.

What exactly does the term executive functioning entail?

A So executive functioning has to basically do with higher order cognitive problem solving, and it subsumes a number of different cognitive tasks. So things like judgment, planning, organization, higher order attention, again conceptual reasoning, novel problem solving, response, inhibition, a number of things.

Q So, is there a difference between executive function and memory?

A Yes.

Q Can you explain that difference?

A Yes. So, again, executive functioning has more to do with problem solving, strategy, organization, these higher order cognitive functioning; whereas, memory has to do with the ability to remember and hold on to information, both in the short term and the long term, and there's memory for past events. So remote memory, as well as memory for newly learned information.

Q Now, we talked about three different things, executive function, and then two subsets of memory, long-term memory and short-term memory in the course of dementia do I was of those start to deteriorate at the same time or different times, or could you describe the course of deterioration?
A Right. So in dementia, more broadly often times you would expect to see impairments in short term memory, earlier on. And then later on, you know, with the course of the illness, then long-term memory would go later, as well as executive functioning. So short term memory and executive function are often earlier symptoms.
Q But say, for example, that for some reason executive functioning does not appear to be deteriorating, but short term memory is deteriorating. Is that a possible scenario?
A Absolutely.
Q In that scenario, is executive functioning somehow affected by the short-term memory loss?
A Certainly could be, because if you don't have the short-term memory in order to figure out strategy or problem solving, or whatever the person may be confronted with, would impede executive functioning ability.
Q So if you are dealing with a situation that is unfolding for the moment, and if a person is dealing with a situation that is unfolding in the moment, and they are exhibiting short-term memory loss, but say, for example, not executive

loss or long-term memory loss, would there still be an impact on decision making?

A There could be. The issue is being able to hold on to multiple pieces of information at one time, and to continue to refer back to those pieces of information in order to put it altogether, and organize that information and make an informed decision.

Q Now, going back to long-term memory.

A Hm hmm.

Q I will ask you about a couple of things, and well they fall into the category of long-term memory or short-term memory.

So, for example, facts are facts, long-term memory or short-term memory, or it depends?

A So typically when you think of facts that are learned earlier prior to an injury that semantics, knowledge, that information would be stored in long-term memory. And then, you know, after the beginning of a disease process, a person could have potential problems learning new facts and holding on to that short term memory.

Q What about vocabulary?

A So vocabulary would be more related to long-term knowledge and memory.

Q So it could be the last together?

A Yes. And, typically, research shows that vocabulary is

an area of cognitive functioning that is pretty robust in terms of, you know, being the later ones to go.

Q Now, you prepared -- did you prepare a report in connection with this case?

A I did.

Q And could you describe the materials that you reviewed on the general course you took in preparing your report?

A Hm hmm.

So I reviewed collateral information, a number of medical records, and legal records as well. I received collateral information from you in terms of describing your concerns about Mr. Bumagin as well, and then I conducted a clinical interview with Mr. Bumagin, and then completed a comprehensive neuropsychological evaluation with him where myself and an assistant administers a number of neurological tests with him.

Q Let's talk about the materials you reviewed.

Did you review Mr. Bumagin's medical records from a prior physician?

A Yes.

Q I'm putting on the screen what is marked as DX-4.

Do you recognize this?

A I do.

Q What do you recognize this to be?

A It was one of the medical records that I received from

you, when I was reviewing the case.
Q And did you rely on that in forming your report, to some degree?
A I did.
Q And I'm showing you DX-5.
Do you recognize this?
A I do.
Q What is this?
A So this is a summary of the results of an MRI brain scan of Mr. Bumagin.
Q Did you rely on that in forming your report?
A I did.
Q And showing you DX-6.
Do you recall this, and it's a three-page document. Do you recall that?
A Yes.
Q And what is that?
A So that's the results of a urine toxicology.
Q Did you rely on that in forming your opinion and conducting your evaluation?
A Yes.
MS. DOLAN: The defense would move DX-4 through 6 in evidence.
THE COURT: Any objection?
MR. TROWEL: No objection, your Honor.

THE COURT: They're admitted.

(Whereupon, Defense Exhibits DX-4 through DX-6 are received and marked into evidence, as of this date.)

BY MS. DOLAN:

Q In relying on these, did you rely exclusively on them?

A No.

Q And what reliance did you place?

A So, again, as a neuropsychologist, I'm gathering multiple pieces of information in order to put together an overall picture of what is going on with a person that I'm evaluating. So it's one piece among many pieces of data that I considered.

Q Were you able to consider independently and verify this information at all?

A No. I received the records. They looked legitimate.

Q But you didn't have an opportunity to go into any sort of verification process, other than reading records for what they were?

A Correct.

Q Now, with respect to DX-4 in particular, was there any aspect of this document that caught your attention in preparing for the evaluation?

A Yes. One primary issue is --

Q By the way -- let me go back.

What is this, first of all, exactly?

A So it's a total neuro care report, and I believe the

person who did the report was Dr. Krishna.
Q And who does it concern?
A It concerns Mr. Bumagin.
Q And was there anything about this report that caught your attention in conducting your evaluation and preparing for it?
A Yes. Two issues were important in my considering this piece of information. Number one was the report of the memory loss and that he was diagnosed with dementia and treated with medication for Alzheimer's.
Q And what medication was that?
A Area /RO September.
Q Are you familiar with that medication at all?
A I'm not a physician, but I have seen patients examined on this medication, yes.
Q Are you familiar with its efficacy?
A Somewhat. Again, I'm not a physician and I haven't prescribed it, but I have again seen it used. The research suggests that it is somewhat efficacious in working with people with Alzheimer's, but it is not a cure. So it's not a cure for the disease.
Q Based upon your understanding of the research, insofar as it applies to your practice, does it improve individuals?
A No, that's not my understanding.
Q What is your understanding, based upon your experience?
A My understanding is that this medication can help

individuals maintain a current level of cognitive functioning, and perhaps some of it suggests that it might delay the eventual decline, but it is not a cure.

Q I'm putting on the elmo DX-5.

Do you recognize -- well, you already recognized this.

What is this exactly?

A This is a summary of MRI findings for Mr. Bumagin.

Q I forgot to ask you, back on DX-4. What was the date of that report or exam?

A It was 7/15/11.

Q And going back to DX-5.

Does this concern Mr. Bumagin?

A Yes.

Q And is it also from Dr. Krishna?

A Yes.

Q What does this reflect exactly?

A The MRI, is that what you are pointing to?

Q I'm just asking you what does this reflect?

A This is the results of an MRI study of a brain, so imaging.

Q Based on this document, when was that done?

A It indicates it was done August 23, 2010.

Q Do you have any familiarity working with the results of MRIs in connection with your practice?

A Yes.
Q And could you describe that?
A So I often encounter MRI results, which are quite pertinent to my practice, and often review summaries like this to incorporate into my results.
Q Okay.
A My findings.
Q And in reviewing this and in preparing for your examination or evaluation of Mr. Bumagin, was there anything that caught your eye here?
A Most importantly were the findings regarding the mild to moderate prominence of the ventricular system, and above that the prominence of the cerebella cell guide.
Q Was there anything else?
A And mild to moderate probable white matter ischemic.
THE COURT: Would you spell ischemic for the reporter.
THE WITNESS: I-s-c-h-e-m-i-c, changes noted to involve the frontal parietal and parietal occipital white matter trapped bilaterally.
Q And why did those catch your eye, and if you can go one by one and explain its pertinence to your evaluation?
A Well, the first two that are highlighted referencing the mild to moderate sulky, and mild to moderate essential system represents brain atrophy.

Q And just to be clear, why does brain atrophy matter?

THE COURT: First of all, what is brain atrophy?

THE WITNESS: Loss of brain tissue, and the correspondence here is as the ventricular system, which is a /-PZ /-P spinal /-L fluid as that gets bigger, and the same with the cerebella sulky, that means there's a loss of brain matter.

THE COURT: Why does that matter?

THE WITNESS: Because that's suggesting pathology within the brain when there's a loss of tissue like this, is atrophy.

THE COURT: What did you mean by pathology?

THE WITNESS: Disease in the brain, basically.

THE COURT: Please continue.

BY MS. DOLAN:

Q Okay. And the third one here?

A That last one regarding the white matter ischemic changes suggests that there's microvascular damage to the white matter tracks in the brain.

Q And what is the significance of that?

A So there's lots of or mild to moderate level of damage to the white matter tracks, which are the connections between the different brain areas. So this suggests more disease and dysfunction, essentially.

Q And what, if anything, are those notations or

observations consistent with?
A Certainly those imaging findings are consistent with Alzheimer's. They are also consistent with some evidence of vascular changes in the brain with the white matter ischemic changes. So that's certainly not absolutely diagnostic of an Alzheimer's diagnosis, but certainly consistent.
Q Would you expect to see that in a normal person?
A Not to that degree.
Q Finally, on Exhibits DH-6, what are these, these three, the three-page document?
A It appears to be the results of toxicology examination or test.
Q Were any substances discovered -- this relates to Mr. Bumagin?
A Yes.
Q Were any substances detected in the urine samples?
A Yes.
Q What substances were those?
A According to those reports, Benzodiazapine, PHC, which is marijuana, and cocaine.
Q Do those substances have any effect on cognitive function?
A Yes, they can.
Q And could you describe that?
A Hm hmm. Certainly they can be related to problems with

learning, memory, attention concentration, working memory, executive functioning, would be the potential areas.

Q And do they have a deleterious effect?

A Typically, yes, although with cocaine in the short term it can actually -- it suggests to increase.

Q Let's talk about that for a minute.

Is there any reason that an individual suffering from Alzheimer's or dementia would self-medicate with these substances?

A Not that I'm aware of.

Q Well, with respect to cocaine particularly, you indicated there was some research to indicate over the short term it could have certain effects?

A It can, yes. It can increase attention in short term.

Q Okay.

So based on that, do you have an understanding why an individual suffering from dementia might self-medicate with these particular substances?

A I don't know. Not researching and examining that issue, I'm not sure I could be comfortable.

Q You can't finalize on that?

A Hm hmm.

Q Now, moving to your report.

Could you summarize how you actually conducted the report? I know you earlier said you administered tests.

Can you give us a brief overview of what happened?
A Sure. I monitored Mr. Bumagin over the course of two days in May of 2012 at the Metropolitan Detention Center.
THE COURT: Two continuos days or separate?
THE WITNESS: Separate.
THE COURT: Go ahead.
THE WITNESS: And on the first day I was accompanied with my assistant as well to help with administration of some of the measures.
THE COURT: How much time did you spend with him on the first day, approximately?
THE WITNESS: Okay. So approximately I would say probably about four hours or so.
THE COURT: And on the second occasion, how many hours?
THE WITNESS: Approximately about four hours as well.
THE COURT: Go ahead, please.
THE WITNESS: And we conducted the evaluation on both days in a quiet visiting room area within the facility.
Q You got a quiet room?
A Yes.
Q Where was it?
A It was one of the visiting rooms, and it was quiet.
THE COURT: No lawyers, right?

THE WITNESS: No, no lawyers.
THE COURT: Maybe that explains it.
BY MS. DOLAN:
Q Was it early in the morning, then?
A It was in the beginning of the day, typically.
Q That explains it. Could you describe --
THE COURT: Hang on a second. Let her cough and get her some water.
THE WITNESS: Thank you.
THE COURT: You're welcome.
Q Would you describe Mr. Bumagin's demeanor throughout your evaluation?
A Throughout the evaluation on both days he was pleasant, cooperative. He demonstrated full range of --
THE COURT: Flirtatious?
THE WITNESS: Not really, no.
THE COURT: All right. Go ahead.
Q We'll get to specifics later, but do you have an opinion on the effort he put forth in connection with your evaluation?
A I do.
Q What is that opinion?
A In my opinion for this evaluation, he provided adequate effort and motivation throughout the testing.
Q And I'm putting on the screen, on the elmo, your DX-7.
Do you recognize this?

A Yes.
Q I will flip to the last page, page 13.
What is this?
A So this is my report from the neuropsychological evaluation.
MS. DOLAN: The defense moves this into evidence.
THE COURT: Any objection?
MR. TROWEL: No objection.
THE COURT: It's admitted.
(Whereupon, Defendant's Exhibit DX-7 is received and marked into evidence, as of this date.)
THE COURT: You may proceed.
Q I believe the report speaks for itself.
So, Dr. Rivera-Mindt, can you just summarize your findings and conclusions?
A Sure. So essentially the results of this report indicate that overall from the global perspective, Mr. Bumagin is having global psychological impairment. It's moderately severe at the time of this evaluation. The domains that I observed as being significantly impaired included learning, memory, executive functioning, and processing speed, and, again, quite significant. There seemed to be some functional impact or relationship between the cognitive impairments and his everyday function, according to his self report, and some of the collateral resources as well. He would lose things,

you know, within the facility. Sometimes he would get lost.

There were also collateral reports from Ms. Dolan, also, that he seemed to be having difficulties, and his sister had reported that he would get lost before he was incarcerated, as well. There appeared to be some functional consequences. It is a limited behavioral sampling because he was incarcerated, but there seemed to be significant functional consequences.

In terms of the possible etiology of these impairments, given the pattern of impairments and the developmental trajectory of his decline, along with the MRI findings and behavioral data, it's possible that it could be Alzheimer's disease. But there are other comorbidities that could be contributory here, because he has a complicated medical background. So he has a history of multiple brain injuries with loss of consciousness, that's based on his self report. He has cardiovascular risk factors that could contribute to this as well, hypertension, now more recently diabetes. He has hypertension, cardiovascular -- - he has a history of significant substance abuse, based on his report, as well. So all of these things can be contributory, but the pattern of the impairment, and together with the MRI findings, the behavioral data, and the developmental sequence of what is happening is consistent with Alzheimer's.

THE COURT: What was the date of this report?

THE WITNESS: May 15 and 18, 2012.

So now we are in 2014.

When is the last time you examined Mr. Bumagin?

THE WITNESS: This was the last time.

THE COURT: So you are not in a position today to state what his condition is, are you?

THE WITNESS: His current condition?

THE COURT: His current condition?

THE WITNESS: So I have not evaluated him recently, so.

THE COURT: Then let me ask you this: To the extent that you saw what you saw when you did the examination approximately two years ago, is there any reason to believe that his condition could not improve, given the fact that presumably he is now precluded from hopefully all, but at least most, of the illegal narcotics that he was consuming at the time, is there any reason to believe that he would get better because he's not having day-to-day exposure to those mere occasions of sin, to use the secular term?

THE WITNESS: In my opinion there's no indication that there would be a likely improvement in his cognitive --

THE COURT: Why is that?

THE WITNESS: Again, the probable etiologies of this type of impairment are likely to be neurodegenerative in

nature. So at this point my hypothesis would be that he's either stable and consistent to where he was last time I saw him, or more likely that he has been declining.

THE COURT: So let me ask you this question: Why couldn't he get better, take away the drugs, take away the bad friends, take away the mere occasions of sin environment, why couldn't he get better?

THE WITNESS: The bad friends I don't think would have an impact, except in terms of risky behavior. But besides that, so if there is, you know, the MRI findings suggests, you know, brain damage, and that can impact on the more recent MRI findings from Butner are consistent with the earlier 2010, I believe, findings. So that brain pathology, that disease in the brain, is still there, and the findings seem very conclusive. So that's one reason I would not expect to see improvement.

Second of all, the probable contributory factors in his impairment are not likely to result in improvement over time. So the developmental trajectory with Alzheimer's would indicate to me that he would be declining and not improving. So with Alzheimer's, I would expect decline. Then the other contributory factors are traumatic brain injury, history of substance abuse, not to mention hepatitis C, which in more recent records it indicates it's chronically activated. So there's a metabolic component

here. And then he has a number of cardiovascular risk factors as well. So all of those issues are likely to continue to be contributory. Even the substance abuse, because one of my areas of research of substance abuse as well, and his history includes extensive cocaine use and heroin use, as well as marijuana, and benzodiazepines, as well. And certainly with opiates like heroin, cocaine, as well, there are long-term effects of those substances, even in the context of being clean at the time.

So in particular with heroin, there are significant impacts in terms of executive -- long-term effects on executive functioning, as well as memory as well.

So, all of those factors together make his brain quite vulnerable to impairment, and it's unlikely that he would be improving. Some of the more dynamic factors could be he has experienced an acute infection or something like that. If it was treated, maybe he would get better, but these other things are more chronic in nature to me.

Q Let's impact that a little bit.

So you mentioned comorbidities. Could you define the term comorbidity?

A Comorbidity is an additional factor that might impact in this case the cognitive functioning or medical factor, for instance.

Q And you mentioned the Butner medical records.

Did I provide you with medical records from Butner in preparation for your testimony today?

A Yes, I received those more recently.

Q Did you have an opportunity to review those and look through them?

A I did.

Q And with respect to the hepatitis C, could you describe what impact, if any, physiological condition such as hepatitis C may I have on cognitive function?

A Sure. So hepatitis C is an active infection and it can impact the brain. It can cause -- it can be related to hepatic encephalopathy --

THE COURT: Can you spell that for the reporter, please.

THE WITNESS: Hepatic, h-e-p-a-t-i-c, encephalopathy, e-n-c-e-p-h-a-l-o-p-a-t-h-y, I believe.

THE COURT: All right. Continue, please.

A So hepatitis C itself can cause changes, you know, to the brain as well. That could cause its own type of dementia, as well. So with hepatitis, it would be more metabolic in nature. We may see more impairments in attention, in concentration, and learning as well.

THE COURT: Could hepatitis C be cured?

THE WITNESS: It's treatable. I'm not sure that it is curable.

THE COURT: Can you reverse the effects of it?

THE WITNESS: You know, I'm not very familiar with that literature, so I don't feel comfortable commenting on that.

THE COURT: Okay. Go ahead.

BY MS. DOLAN:

Q Based on your review of the Butner medical records, was hepatitis C a factor that continued throughout Mr. Bumagin's stay at that facility?

A Yes. In one of the medical records I noted that it indicated that he admitted he had chronic active infection with hepatitis C.

Q And chronic would be quite full?

A Over time, yes.

Q Now, I'm putting on the elmo what has been premarked as 3500-TP, Thomas Patrick -08.

Are you familiar with this, Dr. Rivera-Mindt?

A Yes.

Q And what is this?

A So this is the neuropsychological evaluation that was conducted at the Butner facility for Mr. Bumagin.

Q Who was it conducted by, to the best of your understanding?

A Dr. Tracy Pennuto.

Q Did you have an opportunity to review this report?

A I did.
Q Was this report -- when was this report provided to you, by the way?
A Well, the report in its current state I received this morning.
Q From whom?
A From you.
Q And did you see this data or this report subsumed anywhere else?
A Yes.
Q Where?
A It was subsumed in a competency report from Dr. Grant.
Q Were you provided a copy of the Dr. Grant report?
A Yes.
Q Were you provided a copy of the Pennuto report at that time?
A No.
Q Did you have an opportunity to respond with Dr. Pennuto in preparation for this hearing?
A I did.
Q Could you describe the nature of your correspondence with her?
A Yes.
Q First of all, who put you in touch?
A You put us in touch.

Q Could you describe the nature of your correspondence with her?
A So I corresponded with Dr. Pennuto via e-mail in order to exchange raw neuropsychological data.
Q Did she ever mention that she had produced this report in connection with that exchange of data?
A No.
Q Now, having had an opportunity to review this report, were you able to form an opinion on the findings and conclusions that it reflects?
A Yes.
Q Now, let's talk about -- well, does this report differ essentially from your findings in your evaluation that are reflected in your report?
A So in some ways they are similar and in some ways they diverge.
Q We'll get into the specifics later.
Can you give us an overview of the similarities and the differences?
A So in terms of an overview, the similarities of our reports is that both reports find neuropsychological impairments and deficits in terms of the performance on the different cognitive tests. And both reports do indicate dementia, and the findings could be consistent with Alzheimer's disease. So that's present in both reports.

Q And the differences?

A There are two important differences in the reports. One is that the years of education for Mr. Bumagin in the Butner report is different from mine. And --

THE COURT: In what way?

THE WITNESS: So in the Butner report, Mr. Bumagin is listed as having 14 years of formal education.

THE COURT: Is that true?

THE WITNESS: Not according to my information.

THE COURT: What is your information?

THE WITNESS: In discussing this question with Mr. Bumagin, basically it sounded like he had about ten years of education, and that's consistent with the MCC report that Dr. Brown submitted as well. She also has his education listed as ten years.

THE COURT: What is the other difference?

THE WITNESS: That's one in the sense of important information for data. And the second one is that two of the measures in particular that were used to assess effort and motivation, which includes the Greenwood Memory Test and the VIP, the Volithium Index Profile, I'm not familiar with -- I didn't use those two measures, first of all. And, second, I am not familiar with any research. So according to the validity of those effort measures in use with an individual who has English as a second language and is from

Russia, and that could be an important issue in terms of interpreting the findings.

Q So let's take each of those in turn.

First of all, what is an effort measure?

A So an effort measure has to do with symptom validity, and whether or not a person is putting forth adequate effort and motivation during the evaluation. Because if they are not, then you might have concerns about the validity of the neuropsychological data.

Q Does that mean it basically goes to whether a person is faking it?

A I wouldn't use that word per se, but yeah.

Q So, the effort measures are used to basically determine the likelihood that a person is making up some sort of condition versus actually suffering from it?

A Correct.

Q And how that either way is reflected in their performance on any subsequent testing?

A Correct, it would impact.

Q So in sum it's a control measure?

A That's one way to think about it.

Q Now, let's deal with the test first.

You mentioned the Greenwood Memory Test as an effort measure test?

A Hm hmm.

Q Have you ever measured this test yourself?
A I have. I used to use it in my practice.
Q Did you stop?
A I did.
Q Why did you stop?
A I stopped using this measure, because in my work with individuals who were immigrants and had English as a second language, they consistently performed quite poorly on this test, even though they would perform fine on numerous other well-validated measures of effort, and for me it gave me pause and made me worry about the validity of this measure in immigrant populations for those for whom English is a second language, and it's a somewhat more complicated measure. There's some cultural issues that could be more difficult, so I stopped using it.
Q What about the Validity Profile Test?
A I never used it in my practice, but I had these concerns about the cultural validity with that measures with many of the populations I worked with, so I didn't use it.
Q Did you have those particular concerns with Mr. Bumagin due to his personal background and history?
A Yes.
Q Now --
THE COURT: Well, why?
THE WITNESS: So, again, many of the measures, you

know, this measure is developed in the United States, and with a western centric, you know, approach. And so again with an emigrant, I was concerned it wouldn't intuitively make sense because of the complexity of the measure.

THE COURT: Would you have the same concern if the immigrant had been from Canada or from England and had been a native speaker of English, or was it the fact that it was Russian versus English, or was it the fact that it was eastern versus western? I'm trying to get a sense of whether it is a question of western culture, English language, or a mix?

THE WITNESS: Thank you so much for helping to clear that up.

THE COURT: You're welcome. I used to do that for a living trying to figure out what judges might be wondering. Now I get to ask the questions. Go ahead.

THE WITNESS: So for me it's for somebody from a non-western background, certainly, and then the language issue as well. But I think the cultural issues, at least in my experience, this is based on my clinical experience.

THE COURT: You are the expert, so no need to apologize for it. I'm asking in your view is it language? Is it culture? Is it a mix? Is it western versus non-western?

THE WITNESS: It could be culture and language, because I didn't study it, per se, I'm not able to say with precision which it is.

THE COURT: In Mr. Bumagin's case, what was your understanding of what you were seeing?

THE WITNESS: I chose not to give him the Greenwood Memory Test, but certainly English as the second language, and that came through with findings on the verbal test that I performed. So his performance on other measures that were non-verbal in some cases were better.

THE COURT: How long has he been in the United States, do you know?

THE WITNESS: Since 1979, according to his report.

THE COURT: Which way does that cut in terms of familiarity, in terms of western culture?

THE WITNESS: Culture impacts our world view and it's pervasive. We develop our culture of origin early on from where we are in and how we are raised, and certainly a person can have a strong identity from their culture of origin, irregardless of how long they have been in a new culture, and also can be very dynamic. That's individual

THE COURT: Did you come to a conclusion with respect to Mr. Bumagin in that regard, or you say you didn't give the test, so you didn't come to a conclusion.

THE WITNESS: Correct. So I didn't give this test, so I wasn't able to come to a specific conclusion about it.

THE COURT: Go ahead.

BY MS. DOLAN:

Q At the risk of getting too far into the reads, were there other tests that you had any issues with him? On page 4 of the report, were there any other tests that were administered that you had some concerns about?
A I think that the two tests that I had the biggest concerns about were the Greenwood Memory Test and then the VIP.
Q And according to the report, do you know whether Mr. Bumagin performed with an expectation of any validity measures?
A He did perform with an expectation on a number of measures.
Q Okay.
Now, what are potential explanations for the discrepancy between performing well on some validity measures and not performing well on other validity measures?
A One could be poor motivation, one could be fatigue or frustration, or, you know, perhaps, you know, change in the mental status. I think there could be potentially different reasons for variable performance.
Q What about physiological factors?
A So, certainly a person's mental status from one time to another can change based on medical issues, yes.
Q So, with respect to hepatitis C and diabetes, which we discussed previously, would blood sugar levels or liver